## Message

From: Carol Allen [CAllen@baaqmd.gov]

**Sent**: 6/10/2019 9:28:46 PM

To: Connolly, Scott [Connolly.Scott@epa.gov]

**Subject**: RE: Auto Shredders

Scott,

The two Venturi Scrubbers at Schnitzer were installed in 2017 along with the building enclosure and improved ventilation and capture systems. They replace the old scrubber and demister. The venturis were installed to control PM from the new building capture system. These new venturi scrubbers operate in parallel. The Air District is in the process of updating Schnitzer's permit to reflect these changes. It should be issued in a couple of weeks.

My understanding is that the RTOs would be installed down stream of each venturi scrubber. I have not heard of any plans for subsequent acid gas scrubber. We don't have a permit application for the RTOs yet so this is all still speculation.

Do you have any data on organic and particulate emission rates or organic emission control efficiencies from a shredder system controlled by an RTO?

Do you have an data on secondary TAC emissions from RTOs: formaldehyde, benzene, hydrogen chloride, and hydrogen fluoride?

Carol Allen

From: Connolly, Scott < Connolly. Scott@epa.gov>

**Sent:** Monday, June 10, 2019 12:07 PM **To:** Carol Allen < CAllen@baaqmd.gov> **Cc:** Davis Zhu < dzhu@baaqmd.gov>

Subject: RE: Auto Shredders

Hi Carol,

Thanks for reaching out. I can definitely try to help get you what information I can share, but it might be worthwhile to set up a call to provide context and discuss.

Was the second venturi scrubber added recently? The facility's 2007 stack test only mentions one scrubber and it looks like it was the initial performance test for the control device. Two RTOs would be a very unique set up as all shredders I know of are installing/have installed only one RTO. Do you know if they are planning on including an acid gas scrubber?

I attached several permits for shredders that have or will have RTOs, but unfortunately none of these have venturi scrubbers prior to the RTO. I would think that it would be difficult to maintain a good control efficiency in the RTO downstream of the wet scrubber and there wouldn't be any control of acid gases created in the RTO.

I have an number of source tests that have stack parameters, but not many with RTO's already installed. What kind of test data are you looking for?

If you would like to discuss, let me know and I'd be happy to set up a call.

Best,

## Scott

Scott Connolly Environmental Engineer Air Enforcement Section, ECAD U.S. EPA, Region 9 415-947-4141

From: Carol Allen < CAllen@baaqmd.gov>
Sent: Monday, June 10, 2019 10:48 AM
To: Cannolly Scatt < Connolly Scatt @ and gov

To: Connolly, Scott < Connolly.Scott@epa.gov>

Cc: Davis Zhu < dzhu@baaqmd.gov > Subject: FW: Auto Shredders

Scott,

Hi Scott. As you know, we are expecting Schnitzer Steel to submit a permit application for two regenerative thermal oxidizers (RTO), operating in parallel, one RTO downstream of each venturi scrubber, to control organic emission from their automobile and light iron shredding operation. You mentioned that you have seen a number of auto shredders throughout the US.

Can you provide us with some permit examples for regenerative thermal oxidizers at auto shredders?

Do you know of any applicable BACT or MACT standards for auto shredders with RTOs.

Do you know of any RTOs in use that are operating downstream of a venturi scrubber?

Are there problems or issues with RTOs that have cropped up during initial start-up; what can be done to avoid these?

Do you have any source test data and/or stack parameters for RTOs that we could use to estimate future potential health impacts.

Davis Zhu from my staff will be handling the Schnitzer application when it comes in.

Thank you in advance for your assistance with this matter.

Carol Allen
Assistant Manager
Engineering Division, BAAQMD
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Bay Area Air Quality Management District 375 Beale Street, Suite 600 San Francisco, CA 94105

Carol Allen

From: Salazar, Matt <Salazar.Matt@epa.gov>

**Sent:** Friday, June 7, 2019 9:06 AM **To:** Carol Allen <CAllen@baagmd.gov>

Cc: Connolly, Scott < Connolly. Scott@epa.gov>

Subject: RE: Auto Shredders

Hi Carol,

Thank you for checking and for the time on the call tomorrow. I cc'd Scott and he can be reached at 415.947.4141. Please let me know if you have any questions.

Thank you,

Matt

From: Carol Allen < CAllen@baaqmd.gov > Sent: Thursday, June 06, 2019 5:53 PM
To: Salazar, Matt < Salazar.Matt@epa.gov >

Subject: Auto Shredders

Hi Matt,

I was on the conference call today regarding Schnitzer Steel. Can you forward my contact information to Scott? I could not find his email on line. I would like to discuss his knowledge of and experiences with installation and operation of regenerative thermal oxidizers at auto shredders.

Carol Allen
Assistant Manager
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